

### AMENDMENT TO THE CLAIMS

Please amend the claims as shown below, without prejudice or disclaimer.

1. (Currently amended) A method of detecting the presence of one or more allele specific anti-Major Histocompatibility Complex (MHC) antibodies in a body fluid sample, the method comprising:
  - (a) contacting said body fluid sample with ~~one or more immobilized~~ recombinant MHC molecules ~~which each bind to a different allele specific antibody, if present in said sample~~ immobilized to discrete sites of a solid support such that each site represents one naturally occurring MHC allele, and
  - (b) detecting the binding of said ~~one or more allele specific antibodies to only said the~~ recombinant MHC molecules at each site,  
~~wherein each of said one or more allele specific antibodies is specific for a particular naturally occurring MHC allele and binds to only one of said one or more recombinant MHC molecules which contains one or more epitopes of said naturally occurring MHC allele~~ wherein antibodies directed to each allele, if present in the sample, are separately detected and identified.
2. (Currently amended) A method of detecting the presence of one or more allele specific anti-Human Leukocyte Antigen (HLA) antibodies in a body fluid sample, the method comprising:
  - (a) contacting said body fluid sample with ~~one or more immobilized~~ recombinant HLA molecules ~~which each bind to a different allele specific antibody, if present in said sample~~ immobilized to discrete sites of a solid support such that each site represents one naturally occurring MHC allele, and
  - (b) detecting the binding or absence of binding of said ~~one or more allele specific antibodies to only said recombinant HLA molecules~~ at each site,  
~~wherein each of said one or more allele specific antibodies is specific for a particular naturally occurring HLA allele and binds to only one of said one or more recombinant HLA molecules which contains one or more epitopes of said naturally occurring HLA allele~~ wherein antibodies directed to each allele, if present in the sample, are separately detected and identified.

3. (Original) The method as claimed in claim 1 or 2 wherein said MHC or HLA molecule is a Class I MHC or HLA molecule.
4. Cancelled.
5. (Currently amended) The method as claimed in claim 1 or 2 wherein the antibodies which are detected are selected from the group consisting of IgG, IgM, and ~~or~~ IgA.
6. (Currently amended) The method as claimed in claim 3 wherein said recombinant MHC or HLA molecule comprises a heavy chain,  $\beta_2$ -microglobulin, and a peptide.
7. (Currently amended) ~~A~~ The method as claimed in claim 6 wherein said peptide is derived from HIV, IICV or an influenza virus.
- 8-10. Cancelled.
11. (Currently amended) The method of claim 1 or 2 wherein said recombinant molecules are ~~immobilized~~ bound on a spherical bead.
12. (Currently amended) The method of claim 1 or 2 wherein said wherein said recombinant molecules are ~~immobilized~~ bound on a nitrocellulose strip.
13. (Currently amended) The method of claim 1 or 2 wherein said wherein said recombinant molecules are ~~immobilized~~ bound on an ELISA plate.
14. (Original) The method of claim 1 wherein the recombinant MHC is synthesized in a prokaryotic expression system.
15. (Original) The method of claim 2 wherein the recombinant HLA is synthesized in a prokaryotic expression system.
16. (Previously presented) The method of claim 1 or claim 2 wherein the sample is blood or a blood-derived sample.
17. (Currently amended) The method as defined in claim 1 or claim 2 wherein the bound antibody is detected via a method selected from the group consisting of an immunosorbent assay using an antibody conjugated to a ~~signalling means~~ label or enzyme, detection of colloidal gold, immunoelectron microscopy, flow cytometry, immunofluorescent detection, and ELISA.
- 18-19. Cancelled.
20. (Currently amended) A kit comprising at least the following components:
  - a) ~~one or more immobilized recombinant MHC molecules which each bind to a different allele specific MHC antibody, wherein each of said one or more allele~~

~~specific antibodies is specific for a particular naturally occurring MHC allele~~ a solid support comprising discrete sites, each of said sites comprising recombinant MHC molecules representing a single MHC allele to allow separate detection and identification of anti-MHC antibodies binding thereto; and

b) ~~a means~~ a moiety capable of direct or indirect detection of anti-MHC-antibodies bound only to said recombinant MHC molecules.

21-23. Cancelled.

24. (Currently amended) ~~A~~ The kit as claimed in claim 22, wherein said solid support is ~~a selected from the group consisting of a spherical bead, a nitrocellulose strip, a microtiter plate, and an ELISA plate.~~

25. (Currently amended) ~~A~~ The method as claimed in claim 1 or 2 wherein said recombinant MHC or HLA molecule is in the form of a fusion protein.

26. (Currently amended) ~~A~~ The method as claimed in claim 25, wherein said MHC or HLA molecule is fused to a means of immobilization.

27. (Currently amended) ~~A~~ The method as claimed in claim 26, wherein said means of immobilization is biotin.

28-29. Cancelled.

30. (New) The kit of claim 22 wherein the moiety is detectable by virtue of a property selected from the group consisting of enzymatic properties, radiation emission, scattering, absorption, magnetic properties, and binding to a complimentary agent to produce a detectable effect.

31. (New) The kit of claim 22 wherein the moiety is selected from a group consisting of a radiolabel, chemical label, chromophore, fluorophore, dye, fluorescein, rhodamine, reagent of high electron density, ferritin, haemocyanin, and colloidal gold.

32. (New) The method of claim 1 or 2 wherein the alleles of the one or more recombinant HLA molecules are selected from those listed in Table 4.

33. (New) The method of claim 1 or 2 wherein one to 100 MHC alleles are represented by the recombinant MHC molecules.

34. (New) The method of claim 1 or 2 wherein one to 75 MHC alleles are represented by the recombinant MHC molecules.

35. (New) The method of claim 1 or 2 wherein one to 50 MHC alleles are represented by the recombinant MHC molecules.
36. (New) The method of claim 1 or 2 wherein one to 35 MHC alleles are represented by the recombinant MHC molecules.
37. (New) The method of claim 1 or 2 wherein ten to 75 MHC alleles are represented by the recombinant MHC molecules.
38. (New) The method of claim 1 or 2 wherein 15 to 30 MHC alleles are represented by the recombinant MHC molecules.
39. (New) The method of claim 1 or 2 wherein at least 30 alleles are represented by the recombinant MHC molecules.
40. (New) The method of claim 1 or 2 wherein 30 to 35 alleles are represented by the recombinant MHC molecules.
41. (New) The method of claim 1 or 2 wherein at least 33 alleles are represented by the recombinant MHC molecules.
42. (New) The method of claim 1 or 2 wherein two to ten MHC alleles are represented by the recombinant MHC molecules.